

## REMARKS

Claims 1-3 and 5-11 are pending in the present application. By this amendment, claims 1, 8, 10, and 11 have been amended as to matters of form without introducing any new subject matter. The Examiner's objections and rejections are respectfully traversed in view of the remarks set forth below.

In the Office Action, claims 1 and 10-11 were objected to because of various informalities. Claims 1 and 10-11 have been amended to overcome the objections. Additionally, claims 8 and 10 were rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. By this amendment, claims 1, 8, 10 and 11 have been amended as to matters of form without adding any new subject matter. In particular, independent claim 1 has been re-written to provide sufficient antecedent bases. Accordingly, Applicants respectfully request that the Examiner's objections to claims 1, 8, 10, and 11 be withdrawn.

In the Office Action, claims 1, 5-7, 9 and 11 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,577,637 to Jukka Sieppi (*Sieppi*). Applicants respectfully traverse the Examiner's rejections.

It is respectfully submitted that the Examiner erred in rejecting independent claim 1 and dependent claims therefrom. An anticipating reference, by definition, must disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claim. Claim 1, among other things, calls for a first real time media gateway providing access to and from a first network and a second real time media gateway providing access to and from a second network, wherein the first and second real time media gateways comprise a common

gateway. The Examiner relies upon the *Sieppi* reference, asserting that all the elements of claim 1 are taught by *Sieppi*. The Applicants respectfully disagree. *Sieppi* at least does not teach the first and second real time media gateways that comprise a common gateway. In *Sieppi*, the Direct Access Unit (DAU) associated with the Mobile Switching Center (MSC) is not a second real time media gateway used for providing access to and from the second network. See *Sieppi*, col. 14, lines 60. Instead, the DAU is an IP-interface having an IP-address to enable communications for the MSC of the gateway MSC-GMSC, which the Examiner alleges to be a first real time media gateway providing access to and from the first network. See *Sieppi*, col. 14, lines 11-22 and 58-67. Based on the above-indicated legal standard, it is respectfully submitted that the *Sieppi* reference fails to teach the first and second real time media gateways comprise a common gateway, as set forth in claim 1. Thus, claim 1 and claims dependent therefrom are in condition for allowance which is respectfully requested of the Examiner.

Claim 1 calls for a mobile radio system comprising a plurality of mobile stations and first and second real time media gateways. While the first real time media gateway provides access to and from a first network comprising a plain switched telephone network and/or an integrated services digital network, the second real time media gateway provides access to and from a second network comprising a public internet system. The first and second real time media gateways comprise a common gateway. The real time data may be directed to either the first or second real time media gateway without passing through a third general packet radio system (GPRS) specific gateway providing access to and from the second network.

*Sieppi* describes a telecommunication system as shown in Figure 10 to include an MSC for PLMN features. This MSC may be connected to a GMSC to interfere with a PSTN, as shown in Figure 5. A direct access unit (DAU) coupled to the MSC couples to the Internet.

Moreover, in Figure 10, a route to the Internet goes through first a SGSN block and then a GGSN block, both of which are jointly labeled as a GPRS Features. According to the Examiner, the “PSTN” shown in Figure 5 of *Sieppi* corresponds to the “first network” in claim 1. See Office Action, p. 4. The “internet” of *Sieppi* corresponds to the “second network” in claim 1. The “GMSC” in Figure 5 allegedly discloses the “first real time media gateway.” Likewise, the “DAU” corresponds to the “second real time media gateway” of claim 1. The SGSN and GGSN blocks in Figure 10 of *Sieppi* are jointly asserted to correspond to the third “GPRS specific gateway” set forth in claim 1.

In this way, according to the Examiner, the DAU is equivalent to the second real time media gateway that provides access to and from the second network, as shown in Figure 5 in *Sieppi*. Likewise, the gateway MSC-GMSC shown in Figure 5 is asserted to teach a first real time media gateway for providing access to and from the first network. That is, in rejecting claim 1, the Examiner argues that the first and second real time media gateways comprise a common gateway because the GMSC and DAU of *Sieppi* are in the same domain network, *e.g.*, “common gateway.” However, the distinction between a gateway and an IP-interface that is by definition responsible for providing an IP-address to the same gateway to directly set up a call through the Internet to a mobile station (MS) is completely ignored by the Examiner. Thus, according to the Examiner, because *Sieppi* teaches a gateway MSC GMSC having the DAU (i.e., an IP-interface) coupled thereto, *Sieppi* teaches the first and second real time media gateways that comprise a common gateway. The Applicants respectfully disagree.

*Sieppi* does not support the Examiner’s argument. The GMSC (the first real time media gateway of the common gateway according to the Examiner) and DAU (the second real time media gateway of the common gateway according to the Examiner) do not direct the data stream

to two different networks through a common gateway. *Sieppi* in col. 14, lines 53-67 further describes Step ST 3 in that an exchange G-EX recognizes a call set-up request to a mobile station (MS) coming from an IP-network. The exchange G-EX asks from the gateway MSC GMSC if the mobile switching center (MSC) of the several mobile switching centers (MSCs) within the PLMN where the mobile station is currently located supports an IP-interface (i.e., a direct access unit (DAU)) and asks for the IP-address of the DAU. If the gateway MSC GMSC returns information to the exchange G-EX that the MSC currently serving the mobile station has no IP-interface and thus no IP-address, the call is set up as a normal call from the internet telephone WS to the PSTN and then to the MSC currently serving the mobile station (MS). In *Sieppi*, when the MSC detects that a call is arriving at its direct access unit DAU, the MSC orders the BSC to switch off its audio data encoding/decoding for all calls that are coming to the IP-address of the direct access unit DAU in a specific agreed way (for example, via a predefined part or special IP address or using a specific protocol). See *Sieppi*, col. 14, lines 23-32.

Since *Sieppi* merely permits the direct access unit (DAU) to directly set up calls that are coming to its IP-address in a specific agreed way, the Examiner uses the term “gateway” for the DAU of *Sieppi* and “common gateway” of claim 1 in a manner contrary to *Sieppi* teaching. To the contrary, a gateway by definition is a node that translates between two otherwise incompatible networks or network segments. Gateways generally perform code and protocol conversion to facilitate traffic between data networks of differing architecture. In IP telephony, for example, a gateway converts voice and fax calls, in real time, between the public switched telephone network (PSTN) and an IP network, such as Internet. Such a gateway translates from one set of protocols to another, at levels from the Physical layer (Level 1) up through the Application layer (Level 7) of the OSI Reference model.

However, according to the present invention real time traffic from a mobile station may be routed directly to one of the two real time media gateways. For example, Voice Internet Protocol traffic may be routed via two routes. In other words, if the call traffic is going to the first network, the first real time media gateway may be used. Otherwise, if the call traffic is directed to the second network, the second real time media gateway may be used. See patent application, page 4, lines 6-9. The specification further describes that a real time transport protocol based media gateway (MGW) 28 may be used to connect the mobile station 22 to the first network (the PSDN/ISDN 26). Likewise, to connect to the second network (the IP backbone 30) a first route involves a real time transport protocol based media gateway 32. Therefore, for reasons presented above, the “second real time media gateway” recited in claim 1 cannot and is not a “DAU,” as alleged by the Examiner. For this reason alone, the claim 1 features differ from teachings indicated by the Examiner.

Additionally, *Sieppi* at least does not teach “common gateway,” set forth in claim 1. The DAU (the second real time media gateway according to the Examiner) does not direct the data stream to its destination through one of the first, second real time media gateways where a third general packet radio system (GPRS) specific gateway also provides access to and from the second network. While *Sieppi* describes a first gateway as the gateway MSC GMSC, to provide communication through the PSTN (or the PLMN) and the Internet, *Sieppi* describes an internet PSTN-gateway IG deployed between the PSTN and the Internet. See *Sieppi*, Figure 5, col. 3, lines 56-57 and col. 15, lines 10-16. At most, the Internet can direct the data stream to the PSTN through the internet PSTN-gateway IG or to the DAU of the gateway MSC GMSC. In other words, the Internet does not select a particular gateway in accordance with the nature of the data being real time or non-real time. Moreover, the gateway MSC GMSC and the internet PSTN-

gateway IG of *Sieppi* do not comprise a common gateway. Instead, as set forth above, the internet PSTN-gateway IG of *Sieppi* teaches away from a common gateway. For this reason, it follows that *Sieppi* does not teach the first and second real time media gateways that comprise a common gateway, as set forth in claim 1. Accordingly, the Examiner's application of *Sieppi* to claim 1 is flawed. Claim 1 is thus allowable. For at least the aforementioned reasons, dependent claims 2, 3, 5, 6, and 7 are also allowable.

With respect to rejection of claim 11, Applicants respectfully submit that §102 rejection should be withdrawn since the Examiner fails to establish anticipation based on the teaching of *Sieppi* for at least the aforementioned reasons. Accordingly, claim 11 is allowable.

In the Office Action, claims 2 and 3 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Sieppi*. Applicants respectfully disagree. The Examiner asserts that *Sieppi* discloses time division multiplexing for real time media gateway in Figure 7 and col. 2, lines 51-55 where data and voice correspond to "real time media." The Examiner further asserts that *Sieppi* describes the SGSN-GGSN and DAU for supporting the connection in different types of telecommunication system in col. 6, lines 51-52 using the internet telephone server program as disclosed in col. 10, lines 1-6 for data and voice. The Examiner admits that *Sieppi* fails to disclose the first and second real time transport protocol media gateways. However, takes an Official Notice to support this rejection of claims 2 and 3. Pursuant to the MPEP rules, the Examiner is respectfully requested to furnish a specific citation in the references for each instance where the Official Notice is taken to provide teachings of the claimed subject matter.

In the Office Action, claims 8-10 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Sieppi* in view of U.S. Patent 6,434,140, Barany et al. (*Barany*). It is respectfully submitted that claims 8-10 cannot be rendered obvious in a *prima facie* manner in

view of **Sieppi** and **Barany**, considered either alone or in combination. To establish a *prima facie* case of obviousness, the prior art reference (or preferences when combined) must teach or suggest all the claim limitations. Claim 8 sets forth, among other things, a media gateway controller for controlling said first, second and third gateways and the SGSN.

The Examiner asserts that **Sieppi** discloses the switching means, *e.g.*, BSC and MSC, for controlling the switching among the connections described in col. 2, lines 55-57 but recognizes that **Sieppi** is completely silent about the media gateway controller. The Examiner relies on **Barany** to teach the media gateway controller of claim 8. **Barany** describes an IP interface placed between a circuit-switched network and a GPRS packet-switched network for handling both signaling and bearer traffic. However, **Barany** is completely silent with regard to a media gateway controller, as set forth in claim 8, to control multiple gateways dealing with real time and non-real time data.

The Examiner asserts that **Barany** teaches the media gateway controller, MGC, for example in Figure 2 and at col. 4, lines 7-11. The Examiner also notes that **Barany** further discloses a call agent 'CA' or 'SG' for signaling call control, *e.g.*, "call control server" as claimed in claim 9. This citation by the Examiner by no means supports the Examiner's contention that the MGC described in **Barany** corresponds to the media gateway controller of claim 8. In fact, **Barany** indicates otherwise, since the described embodiments clarify that the call agent (CA) supports the functionality of MGC to support both signaling and bearer traffic through the IP interface. See **Barany** at col. 3, lines 50-53. In particular, the CA at the PSTN Gateway 212 converts signaling packets that are received from SGSN over Gs'ip interface and sends them over the 'A' interface. See **Barany** at col. 4, lines 62-64.

Furthermore, the cited references provide no suggestion or motivation to modify the prior art to arrive at Applicant's claimed invention. To the contrary, **Barany** teaches away from providing a media gateway controller that controls a first and second real time gateways and a third GPRS specific gateway, for controlling real and non-real time data. In particular, **Barany** teaches that the MGC controls traffic in the PSTN Gateway 212, i.e., a single media gateway 213. The MGC is completely silent as to controlling multiple real time media gateways. It is well established that teaching away by the prior art constitutes *prima facie* evidence that the claimed invention is not obvious. Accordingly, the §103 rejection of claim 8 is clearly improper. Applicants respectfully request the allowance of claim 8 for at least the reasons set forth above.

Regarding rejection of claim 9, the Examiner asserts that **Barany** discloses a call agent 'CA' or 'SG' for signaling call control, e.g., "call control server" as claimed in claim 9. The Applicant's respectfully disagree. To the contrary, **Barany** teaches away from controlling calls between a third GPRS specific gateway and a network (the second network). In particular, **Barany** teaches that the CA included within the PSTN Gateway 212 to controls the media gateway 213 in the IP network 211. See **Barany**, Figure 2 and col. 4, lines 7-11.

Claim 9 includes a call control server for controlling calls between the third GPRS specific gateway and the second network by providing access to and from the second network. As noted above, the Examiner overlooks the nature of control for signaling and bearer traffic between two networks namely a circuit-switched network and a GPRS packet-switched network in **Barany**. Thus, according to the Examiner, because **Barany** teaches the CA for inter-network signaling and bearer traffic, **Barany** teaches controlling calls between a third GPRS specific gateway and a particular network, as set forth in claim 9. Accordingly, the Examiner's reliance on **Barany** is erroneous. As such, the Examiner fails to provide any support from **Barany** as to



precisely which GPRS specific gateway and a network have their calls controlled by a call control server. Claim 9 expressly refers to a third gateway, and the Examiner simply ignores the claimed feature. Accordingly, **Barany** fails to teach one or more claimed features of claim 9. Therefore, claim 9 is allowable.

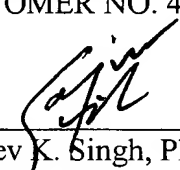
With respect to rejection of claim 11, claim 9 which is representative of features similar or same features in both the rejected claims 9 and 11 is discussed above. To the extent, the arguments presented above are applicable to the Examiners rejection of claim 9, based on the aforementioned reasons, claim 11 is also in condition for allowance, which is respectfully requested of the Examiner.

In view of the foregoing, Applicants respectfully submit that all pending claims are in condition for allowance. The Examiner is invited to contact the undersigned at (713) 934-4089 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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